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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/429,406	10/26/1999	JAMES M. BROWN	QCPA9900029	5890

23696 7590 01/10/2005

Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714

EXAMINER

WILSON, ROBERT W

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/429,406

Applicant(s)

BROWN ET AL.

Examiner

Robert W Wilson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/16/01 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1.0 The application of Brown et. al. entitled METHOD AND APPARATUS FOR EFFICIENT DATA TRANSMISSION CONTROL IN A WIRELESS VOICE-OVER-DATA COMMUNICATION SYSTEM which was filed on 10/26/99 was examined. Based upon further search new prior art was found. A new non-final rejection was written. Claims 2-5 are pending.

Claim Rejections - 35 USC § 103

2.0 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 & 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dirschedl et. al.

(U.S. Patent No.: 6,262,994) in view of Su et. al. (U.S. Patent No.: 5,398,258)

Referring to Claim 3, Dirschedl teaches: A method for transmitting time-sensitive information over a wireless voice-over-data communication system, used in conjunction with a predefined data protocol (Fig or col. 1 line 25-col. 3 line 39) comprising:

Defining a minimum segment size for information to be transmitted (64 Byte per Fig or minimum size)

Defining a maximum segment size for information to be transmitted, said maximum segment size greater than said minimum size (8 kByte per Fig or maximum size)

Generating a first segment from said time-sensitive information if a sufficient quantity of said time-sensitive information is available for transmission, said first segment having a segment size between said minimum segment size and said maximum segment size (It would have been obvious to one of ordinary skill in the art at the time of the invention that the transmitter would sent packets between the maximum and minimum size as defined in the Fig) and

Generating a second segment size less than or equal to said maximum segment size upon the occurrence of a predefined event (The size of the data packet is reduced upon receipt of a

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message indicating the error rate exceeds a predetermined value or predefined event per col. 1 line 25-col. 3 line 39)

Dirschedl does not expressly call for: wherein said maximum segment size is negotiated between a transmitter and a receiver but teaches a radio channel or wireless environment per Abstract

Su teaches: wherein said maximum segment size is negotiated between a transmitter and receiver (negotiate packet size per col. 1 lines 47-57)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the negotiation of Su to the system of Dirschedl between a transmitter and receiver prior to establishment of a session in order to insure compatibility between the two devices.

In addition Dirschedl teaches:

Regarding Claim 2, wherein said predefined event comprises the receipt of an acknowledgment message (The applicant broadly claims "acknowledgment". The examiner interprets receipt of a message indicating the error rate exceeds a predetermined value is an acknowledgment message per col. 1 line 25-col. 3 line 39)

Claim Rejections - 35 USC § 103

3.0 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 & 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dirschedl et. al.

(U.S. Patent No.: 6,262,994) in view of Su et. al. (U.S. Patent No.: 5,398,258) further in view of

Joy et. al. (US Patent No.: 6,728, 263)

Referring to Claim 4, Dirschedl teaches: An apparatus for transmitting time-sensitive information over a wireless voice-over-data communication system, used in conjunction with a predefined data protocol (Fig or col. 1 line 25-col. 3 line 39) comprising:

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Means for negotiating a maximum segment size with the receiver (Transmitter can send 8 kByte per Fig or maximum size packet)

Memory for storing a minimum segment size (64 Byte per Fig or minimum size packet)

Queue for storing data frames, said data frames representing time sensitive (DATA per Fig or time sensitive data)

A first processor for generating at least one segment from said data frames stored within said queue when a segment size greater than or equal to said minimum segment size can be generated from said data frame (The size of the data packet is reduced within the bounds of the maximum and minimum packet size limits upon receipt of a message indicating the error rate exceeds a predetermined value per col. 1 line 25-col. 3 line 39)

Dirschedl does not expressly call for: means for negotiation a maximum segment size but teaches a maximum packet size per Fig; memory for storing a minimum packet size but teaches a minimum packet size; a queue for storing data frames but teaches DATA or time sensitive data per Fig.

Joy teaches: memory for storing a minimum packet size (memory inherent in SIZE SELECTOR per Fig 2 in order to define size); queue for storing data frames (inherent queue in PACKETIZER per Fig 2); and a first processor (inherent processor in PACKETIZER per Fig 2)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the PACKETIZER and SIZE SELECTOR of Joy to the transmitter of Dirschedl in order for the invention to transmit packets or work.

The combination of Dirschedl and Joy do not expressly call for: means for negotiating a maximum segment size

Su teaches: means for negotiating a maximum segment size (negotiate packet size or means per col. 1 lines 47-57)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the negotiation means of Su to the system of the combination of Dirschedl and Joy between a transmitter and receiver prior in order to insure compatibility between the the transmitter and receiver.

In addition Joy teaches:

Regarding claim 5, further comprising a vocoder for generating data frames from said time-sensitive data frames (The applicant broadly claims "vocoder". The reference teaches a CODEC which creates time sensitive data frames of audio data. It would have been obvious to one of

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ordinary skill in the art at the time of the invention that the CODEC creates time sensitive data frames of audio and therefore performs the same function as a vocoder.)

Conclusion

4.0 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W Wilson whose telephone number is 571/272-3075. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on 571/272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Robert W Wilson
Examiner
Art Unit 2661

RWW
January 5, 2005



KENNETH VANDERPUYE
PRIMARY EXAMINER